

What I will learn:


- To investigate a variety of vehicles and their uses and features
- To investigate wheels, axles and chassis
- To be able to investigate ways of creating and decorating the body of a vehicle
- To design a vehicle
- To make a vehicle based on the design
- To evaluate the design and product

Health and Safety

- Keep your work area and floor area clear.
- When you are not using a needle, keep it in the same safe place
- Report all accidents & clean up properly after yourself.
- Walk safely and calmly around the classroom/ workshop
- Follow the teacher's instructions correctly
- When using a needle, keep your fingers well clear. Use a thimble where available.
- Remove any jewellery.


Diagrams and Pictures

Designing
-You need to think about who your product is for – what is its purpose and who is going to use it?
Chassis
-The chassis is the frame or base on which the vehicle is built. A chassis should be strong and rigid enough to hold the vehicle.
-The chassis should include axle holders. These designed so that the axles do not have too much friction against them.
Axle
-Consider what you will make your axle from. It needs to be strong enough to hold the wheels, and fit freely in the axle holder.
Wheel
-Consider whether your wheels will be fixed to the axle, or free.
-If fixed, they need to be firmly attached. If not, they need a stopper to prevent them from falling off.
-Some materials allow the wheel to move more freely on surfaces.



The diagram shows a wooden chassis with two axle holders. Arrows point to the axle holders with the label 'Holes are axle holders'. An arrow points to one of the wheels with the label 'Wheel'.

Overview
Wheels and Axles
Mechanisms are the parts that make something work.
-Mechanisms are all around us! Most objects that help us in our lives are made up of different mechanisms.
Wheels and Axles are mechanisms that help things to move.
-Wheels are circular objects that roll on the ground, helping vehicles and other objects to easily move.
-Axles are rods that help wheels to rotate. The wheel can either rotate freely on the axle, or be attached to (and turn with) the axle.



The image shows a bicycle, a pair of roller skates, and a dumbbell, illustrating different uses of wheels and axles.

Examples of wheels in everyday life



Design Technology Moving Mechanisms Vehicles Year 1 and 2

SUBJECT SPECIFIC VOCABULARY

Wheels and axles are mechanisms that help things to move.

Wheel	Wheels are circular objects that roll on the ground helping vehicles and other objects to easily move.
Axle	a rod on which one or more wheels can rotate, either freely or be fixed to and turn with the axle.
Axle holder	the component through which an axle fits and rotates.
Chassis	the frame or base on which a vehicle is built.
Friction	resistance which is encountered when two things rub together.
Dowel	wooden rods used for making axles to hold wheels.

